

## CLAIMS

What is claimed is:

1. A material on hand checking method of trial-run prototypes/modules relates to a method that employs to proceed the management and control of material shortage status of trial-run prototypes/modules. The disclosed method is through an Enterprise Resource Planning (ERP) server of an enterprise end on the inventory management system in the manufacturing industry. The Enterprise Resource Planning (ERP) server can, therefore, decrease the risk of overstocks in inventory through a certain material exploding method. The disclosed method includes at least the following steps :

10 Receiving at least one build order through the Enterprise Resource Planning (ERP) server;

Determining if the build order is for a trial-run prototype/module;

Transferring the build order back to a storage media;

15 Exploding the bill of material (BOM) of the build order through the Enterprise Resource Planning (ERP) server; and

Integrating the bill of material (BOM) to store it back to the storage media through the Enterprise Resource Planning (ERP) server.

2. The invention as recited in claim 1, wherein the build order includes at least the information : the facility and required quantity of the trial-run prototype/module.

20 3. The invention as recited in claim 1, wherein the storage media provides a plurality of columns to allow various contents in storage.

4. The invention as recited in claim 1, wherein the certain method of exploding the bill of material (BOM) comprises the following steps,

0594045-112704  
FOZET-5404650

Exploding all bills of material (BOM) of the trial-run prototype/module;

Combining modules at the first level of bill of material (BOM);

Exploding the first level of bill of material (BOM);

Exploding the second level of bill of material (BOM); and

5 Repeatedly exploding each level of bill of material (BOM) to the last level of bill of material (BOM).

5. The invention as recited in claim 4, wherein the bill of material (BOM) is a product tree of an enterprise.

6. The invention as recited in claim 4, wherein the bill of material (BOM) comprises at  
10 least one common material and at least one specific material.

7. The invention as recited in claim 6, wherein the common material relates to a general component or part needed for all prototypes/modules, and is evaluated by pre-set column through the Enterprise Resource Planning (ERP) server.

8. The invention as recited in claim 6, wherein the specific material relates to a  
15 particular component or part needed for respective prototypes/modules, the kind of components and parts among which do not overlap in common.

9. The invention as recited in claim 1, wherein the step that the Enterprise Resource Planning (ERP) server explodes the bill of material (BOM) of the build order is to add parent modules of the build order up together, and calculate required materials of respective sub-  
20 modules, then to total them up.

10. The invention as recited in claim 1, wherein the step that the Enterprise Resource Planning (ERP) server integrates the bill of material (BOM) is utilizing inventory quantity deducts reserved stock to generate an available quantity for the trial-run prototype/module.

11. The invention as recited in claim 1, wherein the step of storing the bill of material (BOM) back to the storage media is to store part numbers and quantities of stock-outs for the trial-run prototype/module into columns provided by the storage media.

TO GET THE BEST COPY